Exports of Petroleum Products
1989

National Energy Board
Staff Report

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Foreword

The Western Accord, an agreement reached by the Federal government and the governments of British Columbia, Alberta and Saskatchewan in March of 1985, deregulated crude oil and petroleum product prices. Under this agreement, the Board, among other things, monitors oil markets and reports to the Minister of Energy, Mines and Resources on oil export matters.

The relevant information is gathered monthly and analyzed by the Board to ensure that markets are working in the manner envisaged in the Western Accord. In response to requests from the industry, the Board also prepares on a yearly basis, an overview of the export activities based on the data collected. This report is the fifth such overview on petroleum product exports and covers the calendar year 1989. A review of petroleum product imports is included in this report in order to put exports in the context of the overall trade. The Board also issues an annual report on exports of crude oil.

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Highlights

Since deregulation in 1985, international trade in petroleum products has performed an increasingly important function in facilitating a smoothly operating market in Canada.

Last year, world oil prices strengthened in comparison with 1988 and Canada continued to be a net exporter of petroleum products. The following are the highlights of 1989 with respect to exports of petroleum products.

Volumes

The United States continues to be Canada's largest market for petroleum products. Exporters on the west coast, however, view the Far East as an important ongoing market.

Exports of petroleum products in 1989 averaged 30 400 cubic metres per day, a decrease of five percent from the 1988 level of 32 000 cubic metres per day. This was the second largest volume exported this decade, reflecting the second full year of production from the refinery in Come By Chance, Newfoundland and, also, companies' attempts to maintain their share of export markets.

Motor gasoline shipments registered the largest decrease, down 1 500 to 7 700 cubic metres per day. A large increase in gasoline exports from Ontario did not offset the decline from the Atlantic Provinces and British Columbia.

Prices

Export prices for light petroleum products were relatively close to spot prices in the United States in 1989, except in June and July when attractive prices were obtained for shipments from the Prairies. With the exception of December, the heavy fuel oil export price and the American east coast spot price were similar.

Exports of Petroleum Products in 1989

Introduction

The petroleum products that require an export order from the Board are motor gasoline, middle distillate, aviation turbine fuel, heavy fuel oil and partially processed oil. The export of all other petroleum products and the import of any product can occur without authorization. This report will only address those products listed above.

Exporters provide the Board with data relating to their exports (i.e. price, volume, province of export and destination) each month. Import information is extracted from monthly reports (NEB Form 134) provided by refiners and the major independents.

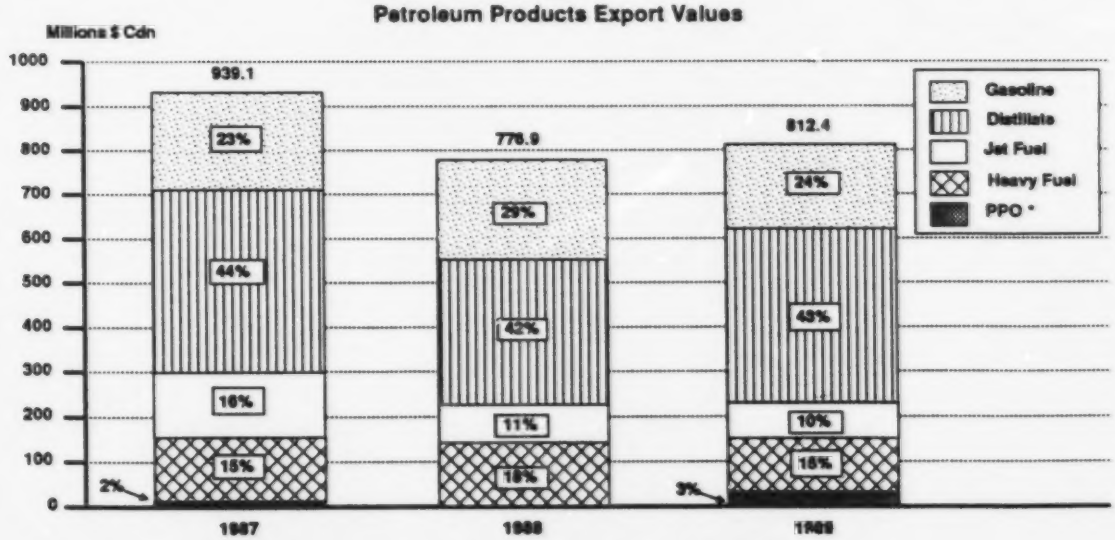
Canada's International Trade in Petroleum Products

In 1989, exports of petroleum products equalled 30 400 cubic metres per day compared with the 1988 and 1987 levels of 32 000 and 22 200 cubic metres per day, respectively. Export revenues in 1989 were $812.4 million compared with $776.9 in 1988 and $939.1 million in 1987 (Figure 1). This excludes the value of products which Canadian refiners produced under processing agreements with foreign oil companies. The increase in 1989 mainly reflects the firming in international oil prices.

Refiners produce a wide range of products in order to meet demand for one or more specific products

Figure 1

Petroleum Products Export Values



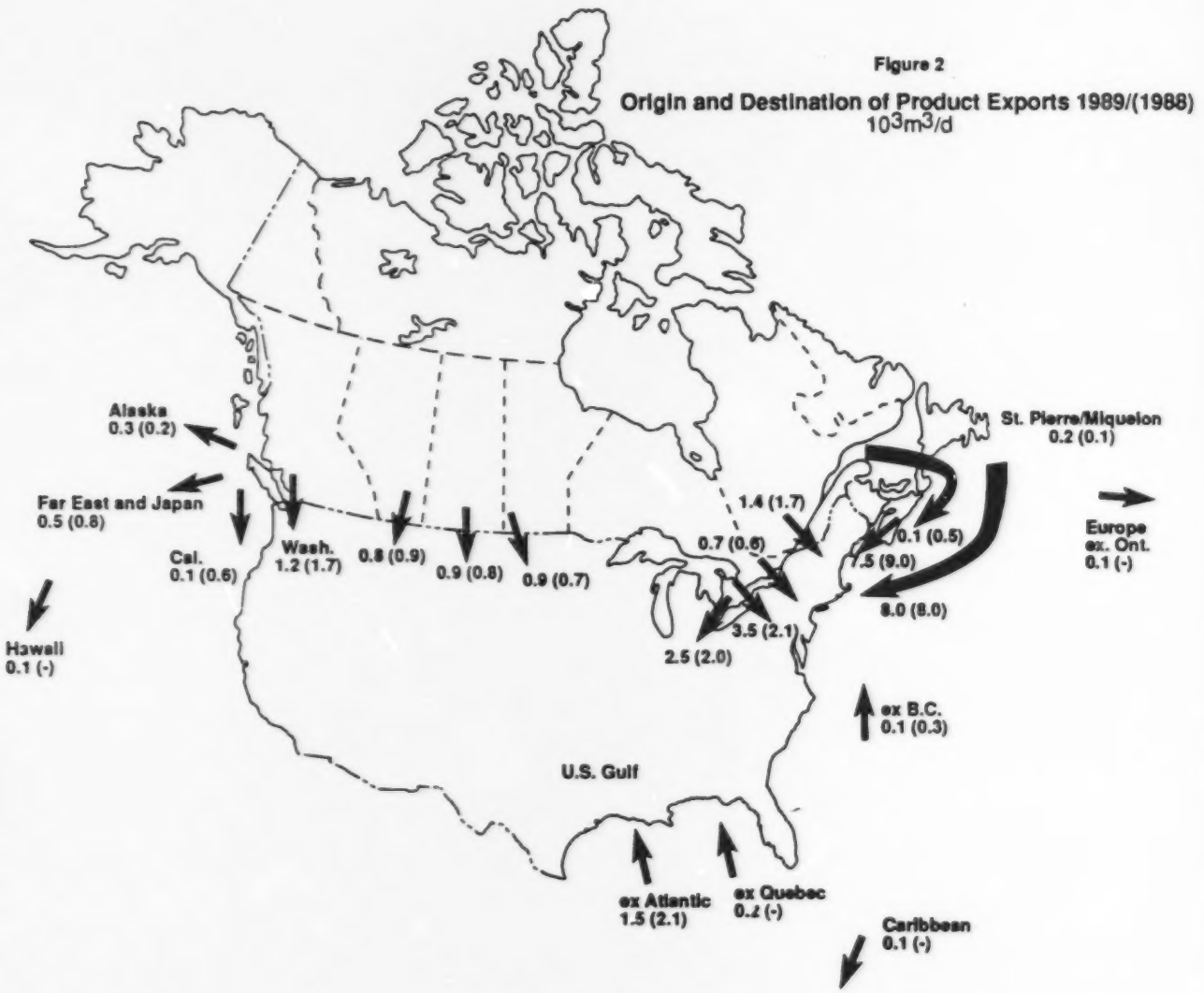
* The value of Partially Processed Oil exports in 1988 was less than one percent of the total

(i.e. gasoline). Canadian refiners access export markets whenever surplus product and/or spare refining capacity becomes available. The United States historically receives the majority of Canada's oil exports; in 1989, this amounted to 97 percent compared with 98 percent in 1988. Canada is the sole supplier to the islands of St. Pierre et Miquelon and from time to time, Canadian exporters have also turned to offshore markets in the Pacific Rim when the economics were attractive. In 1989, shipments were made to China, Japan, Korea and Taiwan, while Canada's only Far East market in 1988 was Japan. In addition, two cargoes were shipped to Europe.

Exports reached a new high in 1988 and this level of trade carried over into 1989, primarily as a result of the production from the Come By Chance refinery in Newfoundland. The refinery, built in the early 1970's primarily to serve export markets on the American eastern seaboard, was subsequently closed and re-opened in September 1987. The American east coast received the largest volume of Canadian exports followed by the Great Lakes region, Montana/North Dakota, the Northeast, and the west coast, respectively.

Figure 2

Origin and Destination of Product Exports 1989/(1988)
$10^3 m^3/d$



Exports

Volumes

Refinery throughput during 1989 averaged 258 100 cubic metres per day, up about three percent or 7 900 cubic metres per day; for the most part, the result of higher processing levels in Ontario and the Prairie Provinces (Appendix I). Product exports accounted for almost 12 percent of the total refinery throughput compared with 13 percent in 1988. On a national basis, refineries operated at about 86 percent of capacity, one percentage point higher than 1988.

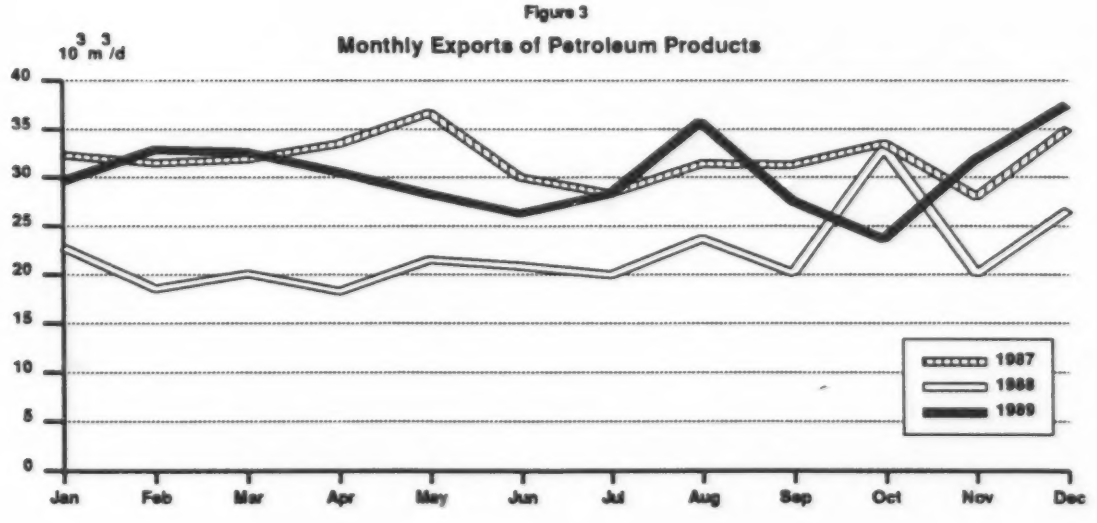
Exports from the Atlantic Provinces represented 38 percent of that region's production, by far the highest in Canada. The next highest was British Columbia and Ontario with nine and eight percent, respectively, of their throughput being exported. Exports from Quebec and the Prairies were four and three percent of refinery throughput, respectively.

In 1989, exports of petroleum products averaged 30 400 cubic metres per day, a five percent decrease from the 1988 level of 32 000 cubic metres per day, but greater than the 1987 level of 22 200 cubic metres per day.

During the first quarter 1989, exports averaged 31 700 cubic metres per day, compared with 31 900 cubic metres per day in 1988. Following this, both years moved in different directions. In 1988, there were large shipments under processing agreements while in 1989, a major refiner in eastern Canada had a prolonged shutdown. Shipments in August 1989 rose as a result of large shipments to the eastern seaboard, agricultural demand in North Dakota and Minnesota and surplus inventories of heavy fuel oil in Ontario.

Subsequently, exports declined to their lowest level in 1989 because of another lengthy refinery turnaround in eastern Canada. Exports in November 1989 rose because of large volumes of heavy fuel oil shipped from the Atlantic region. In December, exports peaked at 37 500 cubic metres per day. Exports of gasoline and distillate increased by 74 and 44 percent respectively over November. Gasoline volumes doubled as a result of large shipments from the Atlantic region and several cargo movements from British Columbia.

Figure 3



Excluding processing agreements, exports in 1988 and 1989 were 14 700 and 13 500 thousand cubic metres per day, respectively, about one-half of total export volumes.

In October 1987, deliveries averaged 33 000 cubic metres per day; the highest level of exports in 1987. The start up of the Come By Chance refinery in Newfoundland during September and subsequent exports in October had a significant impact on the total volume shipped in that month. In November, however, exports declined because of an overall decrease in shipments from the Atlantic Provinces.

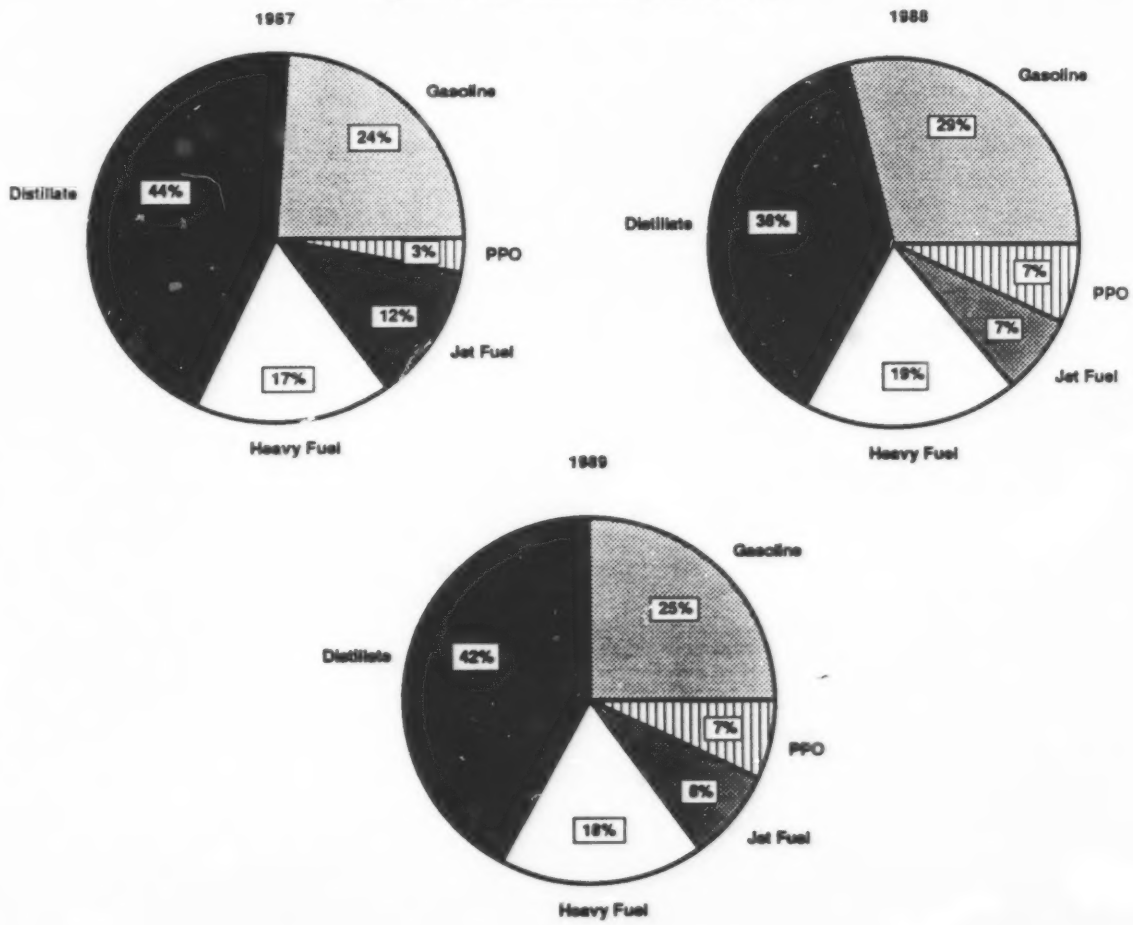
In 1988, exports peaked in May at 36 700 cubic metres per day because of volumes shipped under processing agreements. Subsequently, shipments declined due to low inventories in some regions and poor economics in others. In August, attractive margins on the American west coast sparked an increase in gasoline exports from British Columbia along with a surge in heavy fuel oil shipments from Ontario to New York and Michigan.

A 50-percent decline in distillate movements and a lack of exports of partially processed oil from the Atlantic led the way in reducing November's export volumes to a level of 28 000 cubic metres per day. In December, shipments rose to 35 000 cubic metres per day because of the normal winter demand for distillates and higher than normal exports of heavy fuel oil from the Atlantic region.

Figure 4 sets out the proportion of exports of each product during the past three years.

Figure 4

Exports of Petroleum Products by Type



Exports by Region

Table 1 summarizes product exports by region for the past three years.

Table 1

	1987	1988	1989
		(m^3/d)	
Atlantic	8 000	19 200	17 500
Quebec	2 400	2 100	1 700
Ontario	5 800	4 900	6 800
Prairies	2 200	2 500	2 300
British Columbia	3 800	3 400	2 100
Total	**22 200**	**32 100**	**30 400**

The Atlantic Provinces continued to dominate exports in 1989 with shipments equalling 17 500 cubic metres per day or 58 percent of the total compared with 60 percent in 1988; Ontario was second with 6 800 cubic metres per day (22 percent). In 1989, shipments from Ontario increased by 39 percent over the previous year, primarily because of attractive prices for gasoline in New York, Pennsylvania and Ohio and, refineries in Ontario were able to operate their plants at near capacity during the January to July period (Appendix I). Continued strong demand and attractive prices in Montana and North Dakota allowed exporters from the Prairies to maintain exports at rateable levels.

Deliveries from British Columbia dropped by 38 percent in 1989 while exports from Quebec declined because of increased domestic demand for heavy fuel oil.

Appendix IV provides a breakdown of exports by region and product for the last two years.

Exporters of Petroleum Products

In 1989, 43 companies exported petroleum products compared to 35 in 1988. The increase reflects independents in Ontario and the Prairie Provinces entering the export market.

Newfoundland Processing was the largest exporter in 1989 with 31 percent of the total volume - the same as in 1988. Irving and Imperial followed with 24 and 12 percent, respectively (Table 2), however both companies shipped less volume in 1989.

Shell maintained its fourth position in 1989 while Petro-Canada slipped to eighth position. Noco Energy moved into fifth position and, as a result, replaced Olco as the largest independent exporter. However, Olco's exports increased marginally. Turbo dropped from eighth position in 1988 to thirteenth spot in 1989, mainly because of its change in marketing strategy. Both Texaco and Consumers' Coop moved up the list a few positions and in 1989, MacEwen Petroleum moved into the top 15 list displacing Ultramar.

Table 2
Top 15 Exporters
10^3m^3

	1988		1989	
1.	Newfoundland Processing Ltd.	3 689.4	Newfoundland Processing Ltd.	3 484.5
2.	Irving Oil Limited	3 178.9	Irving Oil Limited	2 704.0
3.	Imperial Oil Limited	1 517.4	Imperial Oil Limited	1 293.7
4.	Shell Canada Products Ltd.	567.9	Shell Canada Products Ltd.	574.3
5.	Petro-Canada Products Ltd.	486.0	Noco Energy Corp.	482.9
6.	Petrosar Limited	401.4	Petrosar Limited	414.4
7.	Olco Petroleum Group Inc.	398.2	Olco Petroleum Group Inc.	413.9
8.	Turbo Resources Limited	264.1	Petro-Canada Products Ltd.	326.2
9.	Universal Terminals Ltd.	235.3	Texaco Canada Inc.	307.6
10.	Noco Energy Corp.	156.9	Sunoco Inc.	174.3
11.	Sunoco Inc.	151.3	Universal Terminals Ltd.	162.2
12.	Texaco Canada Inc.	90.8	Consumers' Cooperative Refineries Limited	127.4
13.	Chevron Canada Ltd.	80.0	Turbo Resources Limited	121.1
14.	Ultramar Canada Inc.	78.1	MacEwen Petroleum Inc.	90.5
15.	Consumers' Cooperative Refineries Limited	75.3	Chevron Canada Ltd.	64.5
	Others (20)	359.0	Others (28)	353.1
		11 730.0		11 094.6

Refiners shipped 86 percent of the product exported in 1989, compared with 91 percent in the previous year. Every refiner, with the exception of Moose Jaw Asphalt and Parkland, exported product. Eleven refiners were in the top 15 exporter list.

Ontario continues to have the largest number of exporting companies, which move primarily middle distillate. Many of these companies are independents which also engage in importing products into Ontario when price differentials make the reverse flow of trade profitable.

The number of companies in the Prairies participating in the export market continues to grow; in 1989, ten companies exported products.

Imports

Volumes

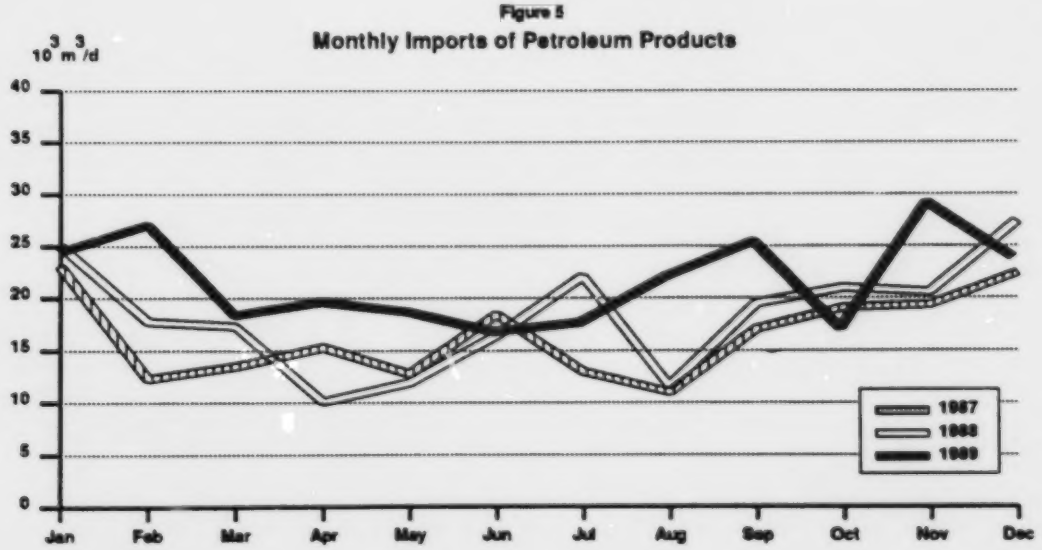
Imports of petroleum products in 1989 amounted to 21 600 cubic metres per day, compared with 18 400 cubic metres per day during 1988. Generally, refiners will import products only to balance supplies. For example, gasoline is brought in during the summer and low pour furnace oil during the winter. Since heavy fuel oil is generally considered a by-product of the refining process, refiners will import the product rather than operate refineries to produce it. In addition, most refineries in Canada do not have the capability to produce large amounts of heavy fuel oil. Independents will import if they cannot obtain sufficient supplies at an adequate price on the domestic market. This is quite common in southern Ontario where independents will import by truck or cargo lots.

Import levels during 1989 fluctuated significantly from month to month, but on a year-over-year comparison, the trends are essentially the same as in 1987 and 1988. Refiners and independents will import to balance operations, which was the case in July 1988, September and November 1989, or when price differentials make imports economical.

In 1989, imports of heavy fuel oil into the Atlantic Provinces and Quebec increased by 33 and 46 percent, respectively, over 1988 levels. The increase results from the greater requirements of electric utilities because of low reservoir levels and higher demand by pulp and paper companies. In Quebec, for example, Hydro-Québec reactivated in late 1988 its thermal electric power plant at Tracy. Hydro-Québec expects to use the Tracy plant for three to four years, which will hopefully allow water reservoirs to increase. It is expected that the incremental demand for heavy fuel oil will be met entirely by imports.

Figure 6 illustrates the proportions of imports of each product during the last three years. Heavy fuel oil continued its dominance in 1989 with 53 percent followed by motor gasoline and middle distillate with 20 and 15 percent, respectively.

Figure 5



Imports by Region

Table 3 summarizes product imports by region for the past three years.

Table 3

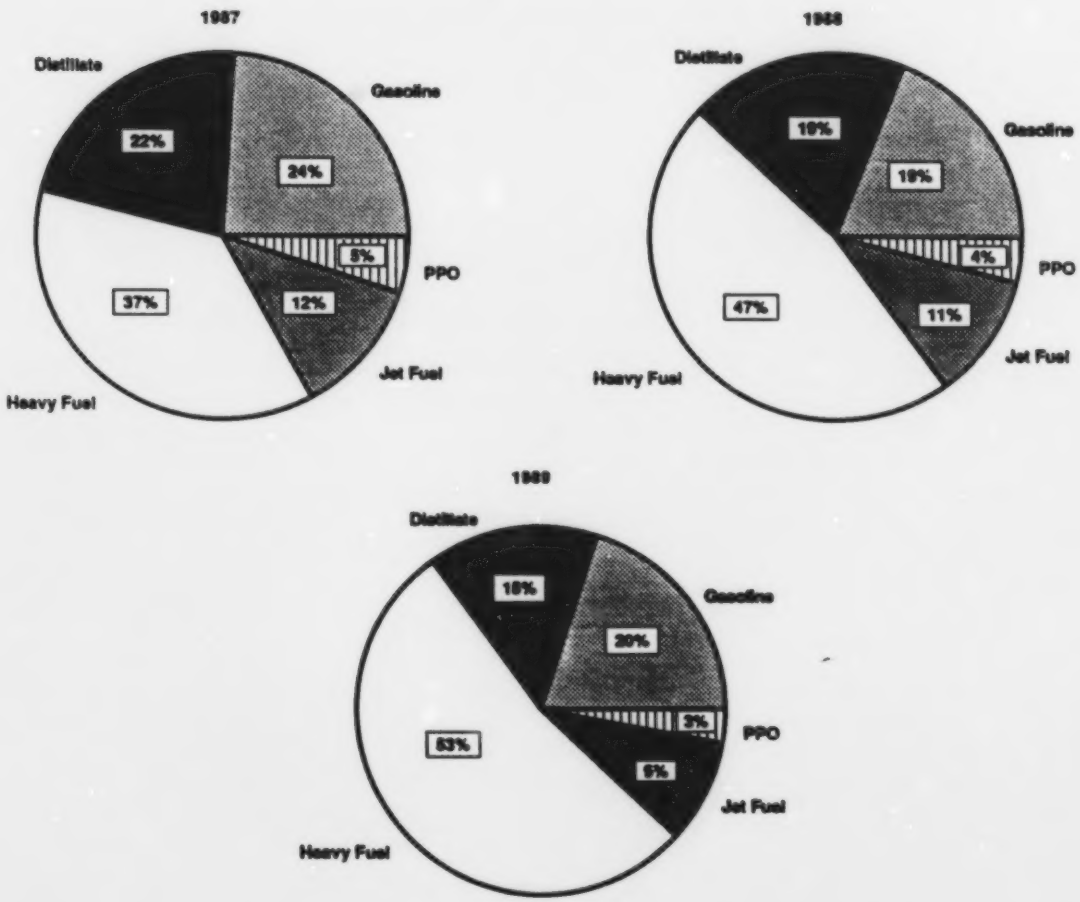
	1987	1988	1989
		(m^3/d)	
Atlantic	6 600	7 300	8 500
Quebec	8 100	8 400	10 700
Ontario	1 000	1 400	800
Prairie	-	-	-
British Columbia	800	1 300	1 600
Total	16 500	18 400	21 600

In 1989, the province of Quebec was again the largest consumer of imported petroleum products. In the Atlantic region, increased demand for heavy fuel oil also resulted in higher import levels. Imports into British Columbia rose by 22 percent partly because of increased demand for aviation fuel. In addition, the demand for pulp and paper products made in British Columbia resulted in manufacturers seeking additional offshore supplies of heavy fuel oil. In Ontario, imports were down by 40 percent as refiners operated at or near capacity in 1989 diminishing the need for imported product. In 1988, certain refiners encountered operational problems, forcing them to import in order to balance refinery operations.

Appendix IV provides a breakdown of imports by region and product type for the past two years.

Figure 6

Imports of Petroleum Products by Type



Prices

Petroleum products move from numerous Canadian locations to a variety of export markets and, consequently, compete against a wide spectrum of prices. Export revenues depend on several factors including access to markets, the quality of the product delivered and an individual exporter's particular circumstances.

One market that offers eastern Canadian exporters relatively high prices is St. Pierre et Miquelon because exports are made in relatively small volumes and there is no other economical source of supply. A market, like Detroit, in close proximity to the Canadian refinery centre of Sarnia, may perhaps offer a higher return than a movement covering several thousands of miles such as the shipments from Vancouver to the Far East.

The availability of transportation also affects what type of price an exporter may expect. Exporters on tidewater can move cargo or barge lots whereas companies in the Prairies generally move their products to the United States via tank truck. The cost of transportation has a significant impact on the amount that an export sale will yield.

As one would expect, higher quality products normally return better prices. For example, premium unleaded gasoline commands a higher price than regular unleaded gasoline. Exports of .7 percent sulphur heavy fuel oil to Wayne County, Michigan receives better prices than 1.5 percent sulphur material to Buffalo.

An individual company's circumstances are often one of the more critical elements in export pricing. Any Prairie refiner with a continuing surplus of heavy fuel oil is too distant from heavy fuel export markets to obtain a high price. On the other hand, an Ontario refiner capable of securing a term contract with American utilities for its surplus heavy fuel, can enjoy very favourable returns. Certain companies export gasoline and distillate into locations at the end of the American distribution chain and, consequently, obtain relatively high prices. Many independent resellers deliver tank truck volumes directly to retail outlets in the United States thus receiving higher prices than companies selling through middlemen. Of course, operating problems faced by the industry such as those associated with inventory containment, refinery imbalances and refinery upsets will always be important when pricing petroleum products for the export market.

The United States is Canada's major customer and exports from Canada generally compete against product available at spot prices in that market. Spot product prices usually relate to cargo or pipeline quantities. However, in certain instances, tank truck deliveries are being made at spot related prices rather than tank wagon prices. The latter are normally quoted on smaller quantities and are therefore generally higher. Again, this will depend on the market being served. The *Oil Price Information Service* provides average United States spot prices for unleaded gasoline and No. 2 fuel oil and these have been used in the following price comparisons. For heavy fuel oil, we have employed the east coast spot price in the United States for 2.2 percent sulphur material as published by *Oil Buyers' Guide*.

Spot Product Prices In the United States

The spot price for gasoline fluctuated significantly in 1989 while the No. 2 oil price remained relatively firm through July, and then rose quickly to its highest level in three years. The heavy fuel oil price strengthened slightly in comparison with the relatively soft prices experienced in 1988.

There are several reasons for the wide fluctuations in spot gasoline prices in the United States during 1989.

First, on March 24th, the Exxon Valdez ran aground off Alaska spilling almost 40 000 cubic metres of crude oil. Oil prices rose sharply as marketers began looking for short-term supplies; however, prices returned to lower levels as Alaskan shipping lanes were reopened. Second, in April, OPEC decided to restrain production to strengthen crude oil prices, which in turn resulted in stronger gasoline prices. Third, the United States Environmental Protection Agency issued new gasoline volatility regulations to help reduce high concentrations of ground level ozone during the June to mid-September period. The new regulations severely limited the use of traditional cheaper gasoline blending components (i.e. butane) to boost octane which had to be replaced with more expensive components (i.e. MTBE). In addition, American motorists have shown an increasing appetite for high octane gasolines (mid-grade and premium unleaded).

In September, the damage by Hurricane Hugo caused spot prices to rise by almost U.S. $4.00 per barrel. A refinery in the Virgin Islands had been operating at approximately 65 000 cubic metres per day prior to being struck by the Hurricane. In addition to this, numerous refiners in the United States were performing routine annual maintenance on their plants at this time.

In the fourth quarter, gasoline spot prices registered their usual decline as refiners reduce inventories at year's end to take advantage of tax considerations. It is also believed that an excess of foreign gasoline in New York harbour was partially responsible for depressing spot prices.

The spot price for No. 2 oil in January 1989 approximated the level in previous years at about U.S. $21.00 per barrel. The spot price for No. 2 oil remained strong in early 1989 partly because it rode on the heels of gasoline's strength. After declining in the spring and remaining relatively flat through August, the spot price for No. 2 oil began its climb in early September at U.S. $22.50 per barrel and completed the year at U.S. $32.15 per barrel, an increase of $9.65 (43 percent).

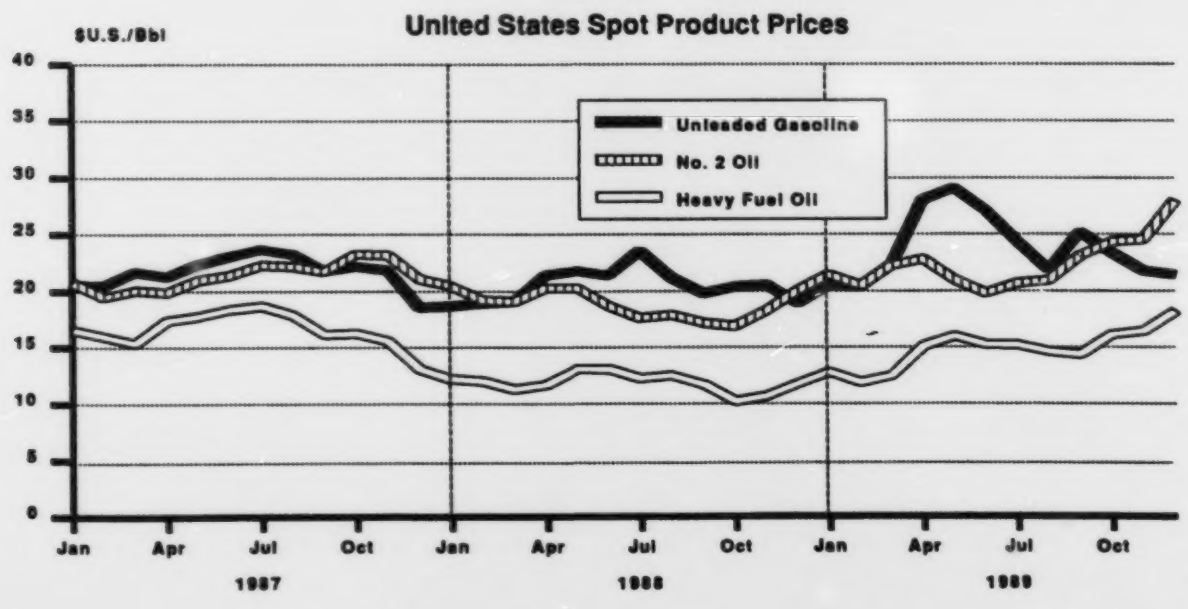
Heating oil prices during December 1989 increased almost 40 percent due to record cold temperatures in the United States. On December 29th, heating oil closed on the NYMEX at U.S. $42.80 per barrel. The prices quoted in late December 1989 are the highest since 1985. Prices were also driven by low heating oil stocks (almost nine million barrels below 1988), panic buying, reduced availability of supply from Europe and a shutdown of Exxon's Baton Rouge, Louisiana refinery (the second largest plant in the United States) because of a fire. The high prices have prompted several states in the Northeast to initiate inquiries into whether there was any evidence of price fixing over the period.

Spot prices for heavy fuel oil along the American east coast saw moderate increases throughout 1989; one of the reasons for this appears to be the increased demand by Hydro-Québec for heavy fuel oil. Low water levels forced Hydro-Québec to re-activate an eight year old mothballed oil-fired plant at Tracy, Quebec. The plant consists of four units, each with a fuel burning capacity of about 1 000 cubic metres per day. Also, increased demand by Quebec's thriving pulp and paper industry which reverted to heavy fuel oil use once Hydro-Québec's price incentives were phased out in mid-1988, appears to have had some impact on spot prices in the eastern United States.

Export Prices versus United States Spot Prices

Shippers' export prices are assessed each month against relevant export markets but, for the purposes of this report, export prices for each of the main petroleum products (gasoline, middle distillate and heavy fuel oil) have been averaged to highlight the general price patterns in comparison with United States spot prices. Comparisons have not been made with import prices due to insufficient data.

Figure 7



Motor Gasoline: Export Prices versus United States Spot Prices

The majority of gasoline imported and exported from Canada is unleaded, with the remainder consisting of both regular leaded grade and blending components.

During 1987 and 1988, the export price and the United States spot prices were relatively close. There were, however, a few minor differences. For example, in September 1988, the export price was above the spot price because of strong returns on exports from eastern Canada and British Columbia.

As indicated earlier, the spot price fluctuated significantly in 1989. In most months, the export price followed the ups and downs of the spot price. In June and July, the average export price remained strong mainly because of the high prices obtained for shipments from the Prairies into Montana, Minnesota and North Dakota.

Although both prices fell in the fourth quarter 1989, the differential increased as the quarter progressed. The export price was affected by healthy prices for sales from Ontario while the United States spot price was influenced by an apparent excess of gasoline in New York harbour and refiners' efforts to reduce inventory.

Middle Distillate: Export Prices versus United States Spot Prices

Figure 9 provides a monthly comparison of the average export price with the United States spot price for furnace fuel oil.

For most months, both prices were very close which illustrates the point that Canadian companies generally base their export prices on United States spot prices. In a few instances (e.g. late 1987, first quarter 1988 and June 1988) export prices were higher as a significant volume was moved by truck to areas where prices were attractive.

Demand for heating oil in the United States during November and December 1988 rose eight percent over 1987 and, coupled with lean inventories, spot prices rose by about 2.5 cents a litre over October's level. The November export price was depressed by large exports from western Canada where end-market prices were soft, while in December, prices rebounded.

The trend continued in 1989 as export prices mirrored the United States spot price. In the fourth quarter, when spot prices rose sharply, export prices kept pace.

Figure 8

Comparison of Motor Gasoline Prices

Export vs U.S. Spot

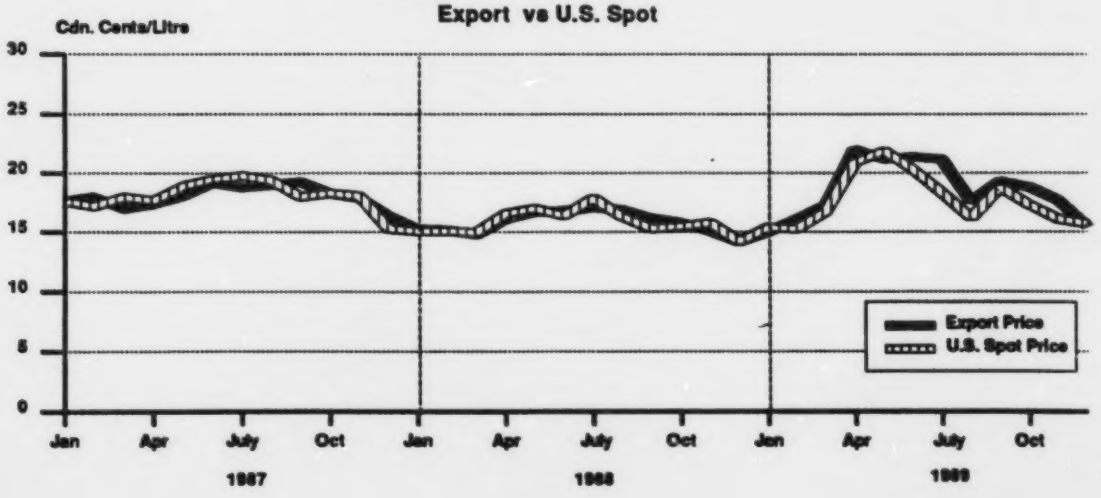


Figure 9

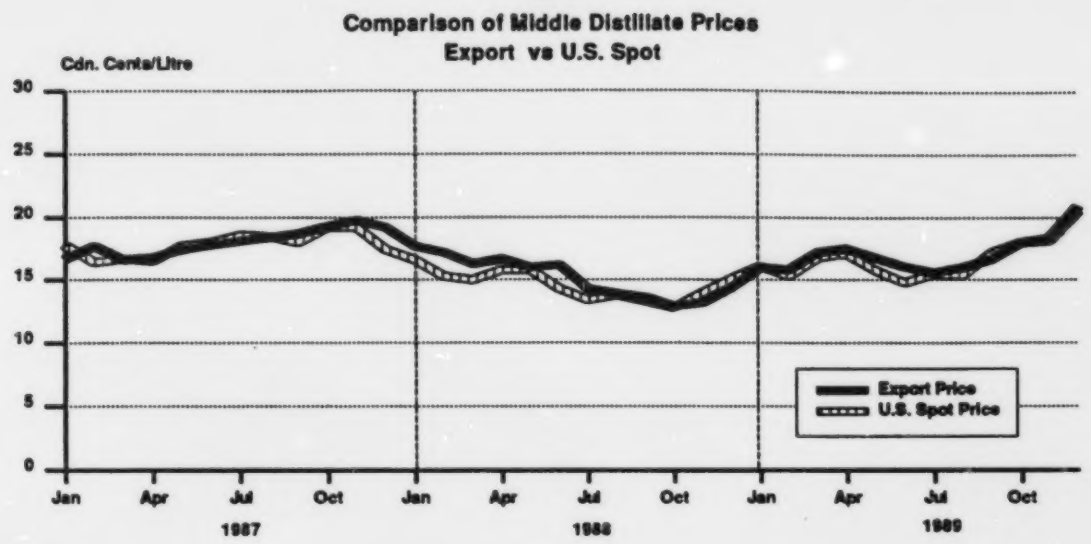
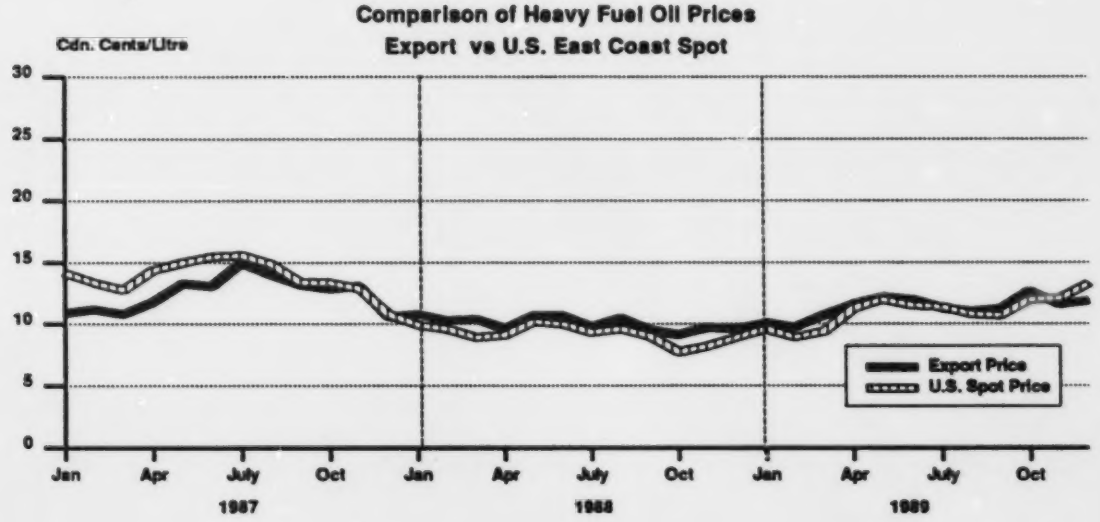


Figure 10



Heavy Fuel Oil: Export Prices versus United States East Coast Spot Prices

Figure 10 shows the average export price in comparison with the American east coast spot price.

During the first half of 1987, there was essentially a constant differential between the two prices. There are several reasons for the high spot price - low inventories in the United States and Venezuela, tight supply of Western Hemisphere heavy crudes and an unusually strong spot demand in the United States.

Heavy fuel oil spot prices remained relatively flat throughout most of 1988. Spot prices peaked in May and June at approximately ten cents per litre and bottomed out at eight cents per litre in October. The spot price rose gradually through November and December in response to the rise in natural gas prices occasioned by cold weather along the American east coast as well as high freight rates on cargoes from Europe.

In 1989, the average export price was usually slightly above the spot price. In the fourth quarter, high netbacks made exports attractive from Quebec and Ontario. In December, spot heavy fuel oil prices were primarily influenced by the unseasonably cold weather.

Export Prices versus Rack and Bulk Contract Prices

Several refiners in Canada publish rack prices for large volume sales to private brand resellers and are applicable to sales at most primary distribution terminals. Rack prices are reported net of federal sales and excise taxes and provincial sales taxes and are available regularly in the trade press.

During the past three years, some large buyers were reportedly obtaining discounts off rack prices and in other instances, buyers received a discount off rack by paying crude oil price plus a processing fee for their product. *Oil Buyers' Guide* also provides what is called the bulk contract price in its Canadian Terminal Prices section. This price is intended to reflect the current price in the Canadian market to a typical medium sized reseller; these prices were below the rack price during 1988 and 1989. In the next two graphs, average export prices from Ontario for gasoline and middle distillate have been compared with the Toronto rack price and the Toronto bulk contract price. It should be noted that rack prices are not quoted by sellers for heavy fuel oil and aviation fuel.

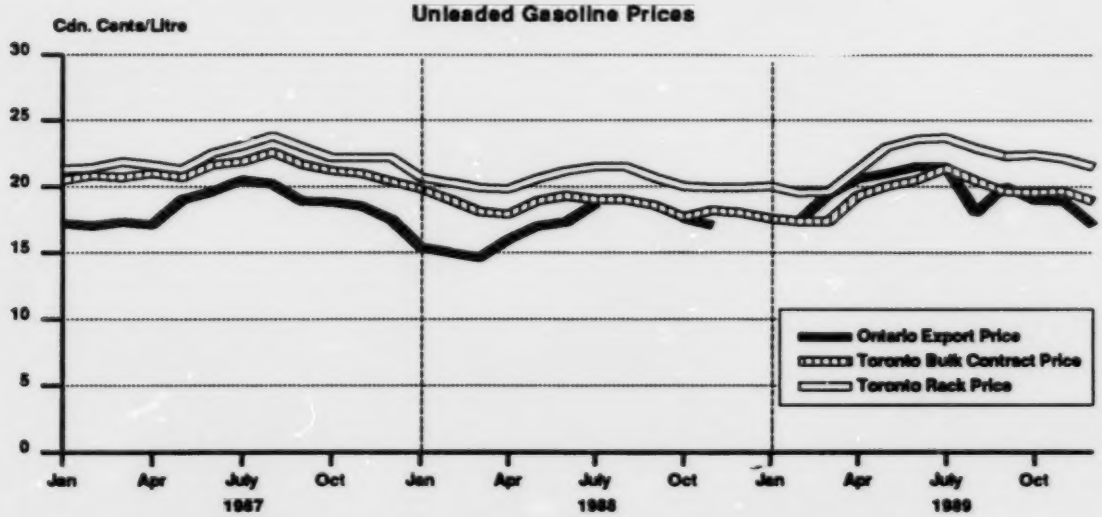
Motor Gasoline

In 1987, the Ontario export price for unleaded gasoline was below the Toronto rack and Toronto bulk contract price. This trend continued through the first half of 1988. Exports were relatively low in the third quarter 1988 as inventories were tight and economics favoured imports. In addition, the number of companies exporting was minimal and, as a result, export prices cannot be released. In December 1988 and January 1989, only two companies exported gasoline and therefore prices cannot be shown for reasons of confidentiality.

In several instances during 1989, the export price was either above the bulk contract price or equal to it. On a few occasions, the export price approximated the rack price. This change from previous years mainly reflects the entry of a new exporter and, in addition, the good return offered by the market being served. The volume of gasoline exported from Ontario is not large and, therefore a cargo export or a case similar to the one above can influence the average export price.

Figure 11

Unleaded Gasoline Prices



*Export prices cannot be released for reasons of confidentiality in the following months: August, September, and December 1988, and January 1989.

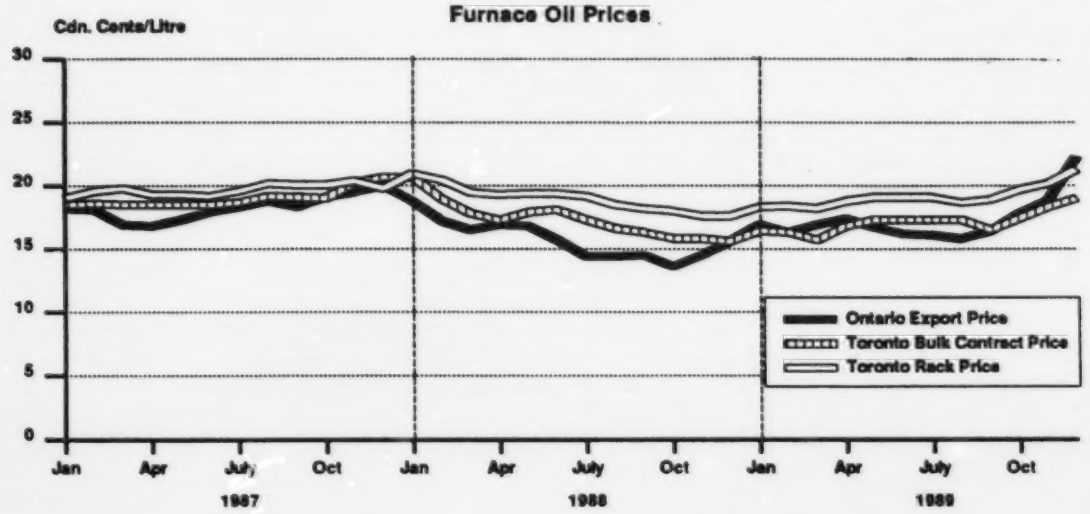
Middle Distillate

With the exception of the March to May period, all prices remained relatively close during 1987. In 1988, however, the export price was generally below the rack and bulk contract price reflecting competitive pricing by certain exporters that exported cargo lots.

In 1989, the relationship between export price and bulk contract was renewed in most months while the differential between export price and rack price narrowed in comparison with 1988. However, in December 1989, export prices rose in reaction to the extremely cold weather and the low inventories in the United States. Rack and bulk contract prices did not react as quickly.

Figure 12

Furnace Oil Prices



Conclusions

Export and import trade in petroleum products continues to be an important and integral part of the oil refining and products supply industry. The two-way trade inhibits Canadian prices from rising as importers take advantage of price swings. Exports occur to balance refinery yields and provide refiners with attractive short-term outlets for excess supply. The range of products traded, their wide geographic distribution and the number of large and small companies involved attest to the competitive flexibility of petroleum product markets.

Independents were able to increase their export market share in 1989 to 14 percent, compared with 9 percent the previous year. All refiners in the country, except for Moose Jaw Asphalt and Parkland, exported product in 1989.

Ontario continues to have the largest number of exporting companies, many of which also import product when price differences make it profitable. This factor tends to make southern Ontario, which has ready access to alternate supplies in the Buffalo and Detroit areas, consistently the most price competitive area in Canada.

In 1989, world oil prices strengthened in comparison with 1988. The price of West Texas Intermediate delivered to Chicago last year averaged U.S. $19.55 per barrel compared to U.S. $16.65 per barrel in 1988. Export prices for Canadian produced petroleum products also rose in 1989. While product imports rose during the year, this was more than offset by exports and Canada remained a net exporter of petroleum products.

The United States continues to be Canada's largest market for petroleum products. Exports in 1989 averaged 30 400 cubic metres per day, a decrease of five percent from the 1988 level of 32 000 cubic metres per day. This was the second largest volume exported this decade.

For the most part, export prices for light petroleum products remained relatively close to spot prices in the United States. The price of motor gasoline and furnace oil exported from Ontario was generally close to bulk contract prices but below Toronto rack prices. The heavy fuel oil export price was slightly above the American east coast spot price in most months.

Petroleum product imports were 21 600 cubic metres per day in 1989 compared with 18 400 cubic metres per day in 1988. Imports of heavy fuel oil eastern Canada rose by 36 percent in 1989 because of industries switching from electricity and the high demand for thermal electricity generation.

The largest volume of imports in 1989 was again destined for Quebec. Quebec was the only region in Canada where imports were greater than exports reflecting available refinery capacity compared to product demand.

In summary, since deregulation in 1985, international trade in petroleum products has performed an increasingly important function in facilitating a smoothly operating market in Canada and, from the evidence, continued to do so in 1989.

Metric Conversion Table

The following table is provided for the convenience of readers who may be more familiar with the Imperial System.

Approximate Conversion Factors

1 cubic metre	=	6.3 barrels
1 cubic metre	=	1 000 litres
1 litre	=	0.22 Imperial gallons

Abbreviations

The following list of abbreviations have been used in this report.

10^3m^3	=	thousands of cubic metres
m^3/d	=	cubic metres per day
$10^3m^3/d$	=	thousands of cubic metres per day
Bbl.	=	barrels
MTBE	=	methyl tertiary butyl ether
OPEC	=	Organization of Petroleum Exporting Countries
NYMEX	=	New York Mercantile Exchange

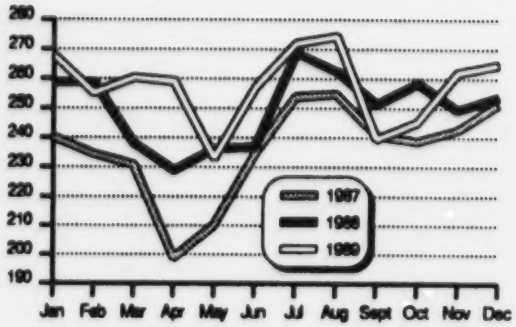
List of Definitions

Aviation Turbine Fuel:	Relates to jet A and jet B.
Heavy Fuel Oil:	All grades of residual-type fuels including bunker fuel oil, fuel oils #4, #5, #6 and residual fuel oil.
Middle Distillate:	Stove oil, furnace fuel oil (No. 2) and diesel fuel.
Motor Gasoline:	Includes regular leaded, all types of unleaded and also gasoline blending components.
Partially Processed Oil:	Includes such streams as vacuum gas oil and naphtha.

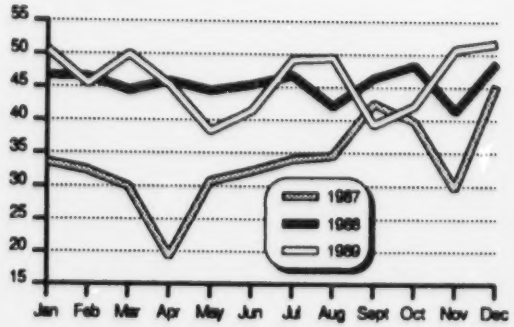
Refinery Crude Runs

$10^3 m^3/d$

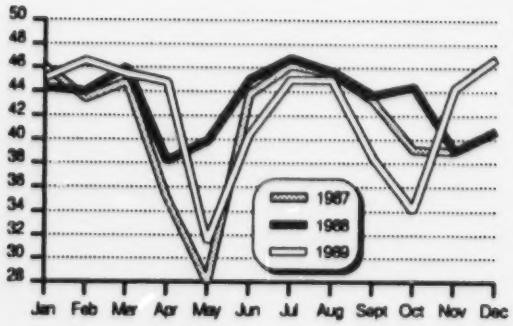
Canada



Atlantic

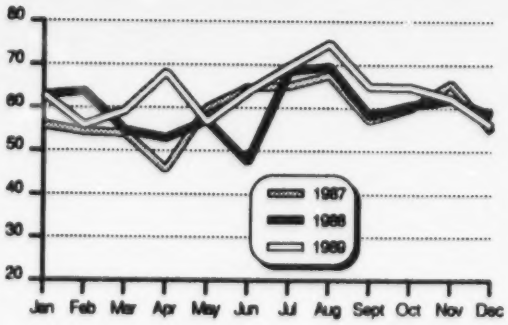


Quebec

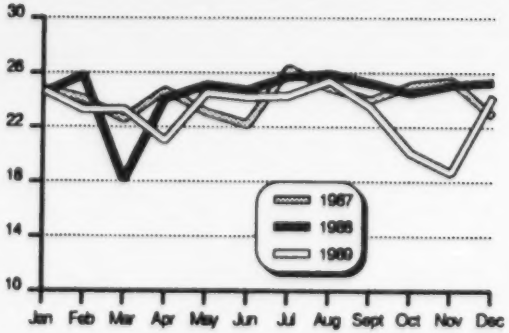


Ontario

Prairies

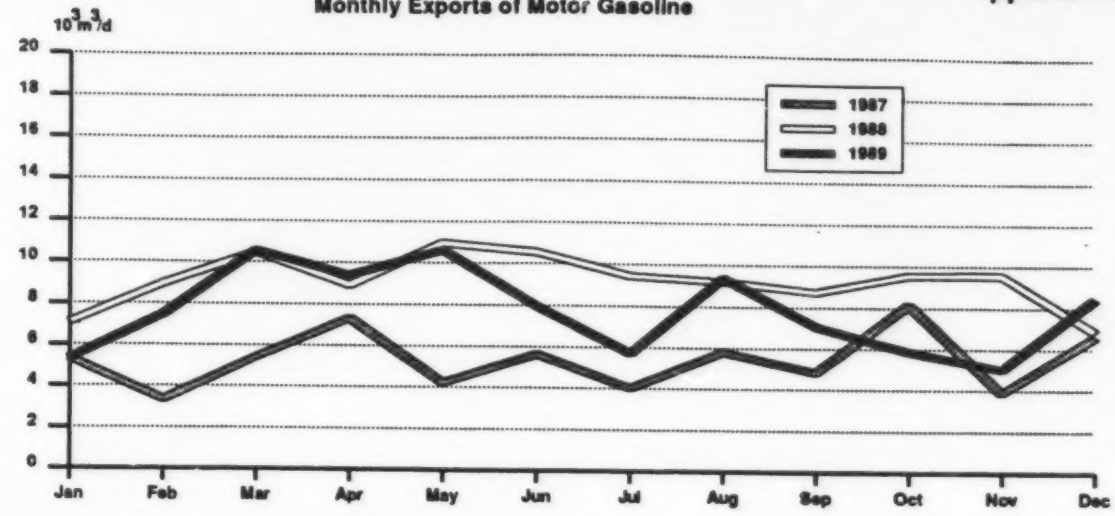


British Columbia

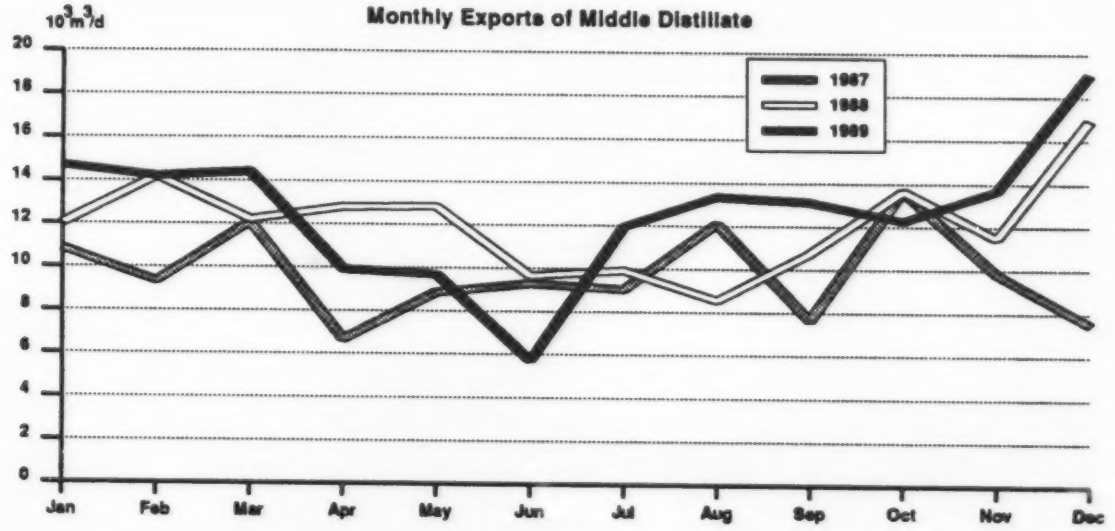


Source: Operating Data Division
Gas and Oil Branch

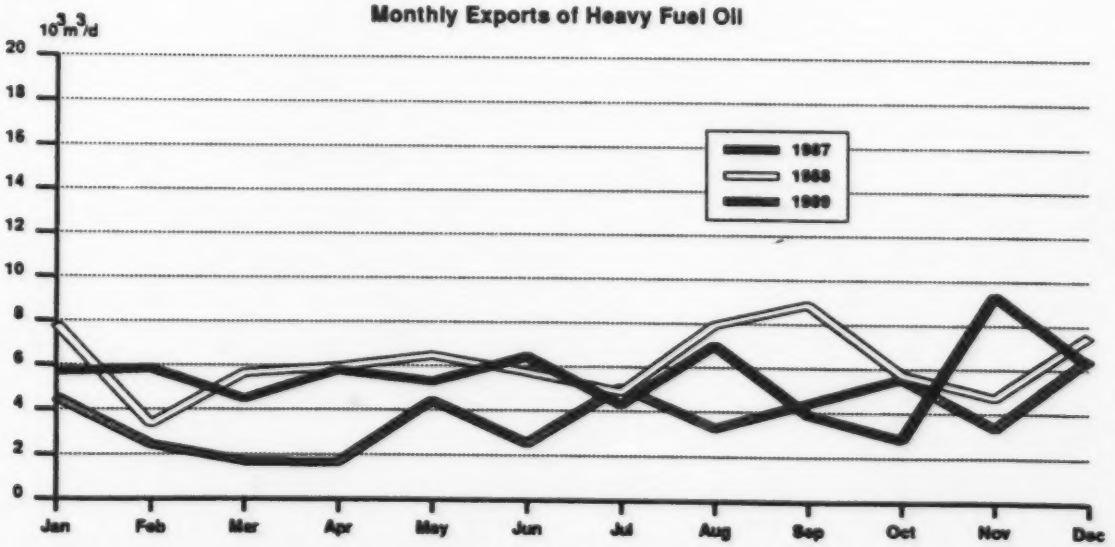
Monthly Exports of Motor Gasoline



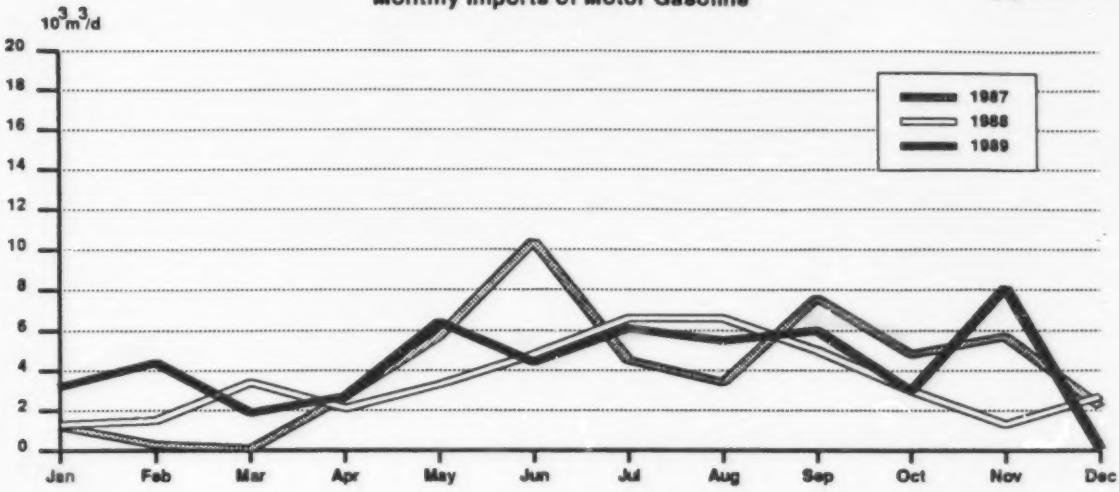
Monthly Exports of Middle Distillate



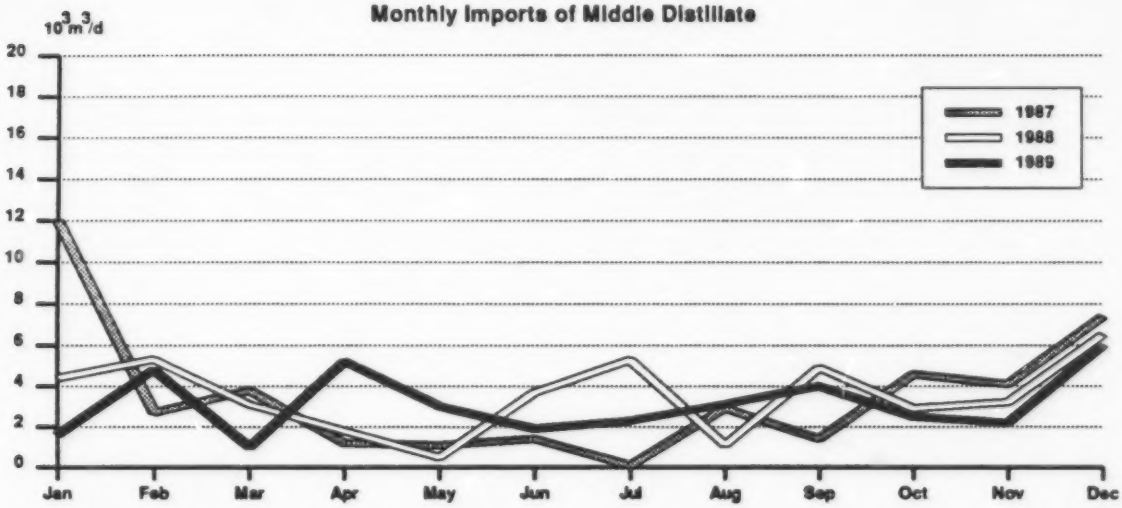
Monthly Exports of Heavy Fuel Oil



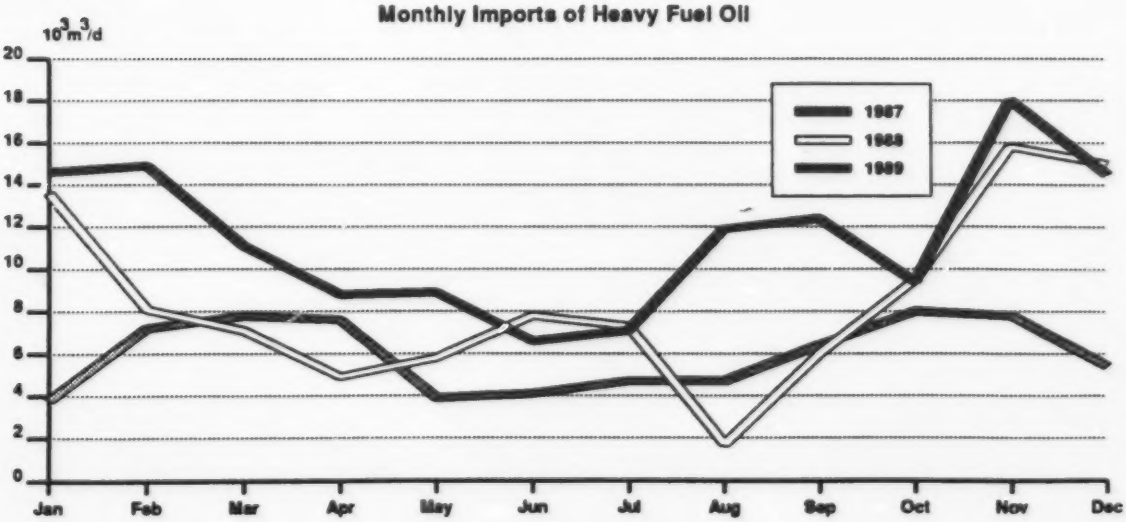
Monthly Imports of Motor Gasoline



Monthly Imports of Middle Distillate



Monthly Imports of Heavy Fuel Oil



EXPORTS OF PETROLEUM PRODUCTS - 1988 VERSUS 1989

(Thousands of Cubic Metres)

Region	Motor Gasoline		Middle Distillate		Aviation Turbine Fuel		Heavy Fuel Oil		Partially Processed Oil		Total	
	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989
Atlantic	2 249	1 780	2 615	2 600	376	453	1 013	986	772	560	7 025	6 379
Quebec	111	64	343	380	2	1	315	110	-	63	771	618
Ontario	196	441	654	1 008	104	151	825	830	-	66	1 779	2 496
Manitoba	103	109	110	129	46	75	-	1	-	-	259	314
Saskatchewan	80	86	98	91	117	85	35	53	-	-	330	315
Alberta	70	53	204	115	-	-	31	31	-	-	305	199
Prairies	253	248	412	335	163	160	66	85	-	-	894	828
British Columbia	555	294	411	309	204	118	70	3	21	49	1 261	773
Canada	3 364	2 827	4 435	4 632	849	883	2 289	2 014	793	738	11 730	11 094
$10^3 m^3/d$	9.2	7.7	12.1	12.7	2.3	2.4	6.3	5.5	2.2	2.1	32.0	30.4

IMPORTS OF PETROLEUM PRODUCTS - 1988 VERSUS 1989

(Thousands of Cubic Metres)

Region	Motor Gasoline		Middle Distillate		Aviation Turbine Fuel		Heavy Fuel Oil		Partially Processed Oil		Total	
	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989
Atlantic	73	-	318	309	232	62	2 064	2 736	-	-	2 687	3 107
Quebec	874	1 371	809	700	377	561	783	1 149	246	137	3 089	3 918
Ontario	213	133	96	37	128	40	34	2	29	86	500	298
Manitoba	5	-	-	-	-	-	-	-	-	-	5	-
Saskatchewan	1	-	-	1	-	-	-	-	-	-	1	1
Alberta	-	-	-	-	-	-	-	-	-	-	-	-
Prairies	6	-	-	1	-	-	-	-	-	-	6	-
British Columbia	108	82	73	87	33	66	250	303	-	27	464	565
Canada	1 274	1 586	1 296	1 134	770	729	3 131	4 190	275	250	6 746	7 889
$10^3 m^3/d$	3.5	4.3	3.5	3.1	2.1	2.0	8.6	11.5	0.7	0.7	18.4	21.6
NET EXPORTS/ (IMPORTS)	5.7	3.4	8.6	9.6	0.2	0.4	(2.3)	(6.0)	1.5	1.4	13.6	8.8